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DIGITAL LPTV FACILITY
CONSTRUCTION PERMIT APPLICATION
MINOR CHANGE APPLICATION
WDNP-LD
FCC FACILITY ID: 67986
TAMPA, FLORIDA

OCTOBER 2023

ENGINEERING NARRATIVE

Minor Change Application:

WDNP -LD seeks to modify its existing license permit to specific new antenna system parameters, an increase in effective radiated power to 15.0 kilowatts. No other changes are proposed. The antenna is a PSI PSILP12AMR horizontally polarized directional UHF slot antenna system. A full-service filter mask is employed. The facility requested is not contingent upon a grant or channel move of any other known facility at the time of filing.

Maximum Effective Radiated Power (ERP) is 15-kilowatts, horizontal polarization only.

Modification Compliance:

Pursuant to 47 CFR §74.787(b) the instant application is considered a “minor” change because;

- There is no change in transmitting antenna location such that the protected service contour resulting from the change does not overlap some portion of the protected service contour of the authorized facility of the station license as illustrated in Figure 1, Present & Proposed Service Contours.
- There is no change in transmitting antenna location ***greater than 30 miles*** (48.27 km) from the reference coordinates of the existing station licensed antenna location, as noted below:

CALCULATED DISTANCE BETWEEN EXISTING LICENSE AND PROPOSED SITES
NO CHANGE IN SITE LOCATION

SITE	LAT (NAD83)	LON (NAD83)	(KM)	(MI)
CURRENT/EXISTING	27-55-54.9 N	082-24-03.9 W	0.00	0.00
PROPOSED CP APP	27-55-54.9 N	082-24-03.9 W		

FCC Tower Registration - 1267122

FAA Notification Not Required.

The proposed antenna mounting structure is 188.0 meters in overall height above ground level (AGL). No change in the overall height of this structure will occur. This is an existing communication tower that does not require further FAA notification. The antenna is to be side-mounted on the supporting structure at the 100.0 meter AGL level.

Antenna Elevations:

The ground elevation at the site is 3.0 meters above mean sea level (AMSL). The center of radiation of the proposed antenna is 100.0 meters above ground level (AGL). The center of radiation is 103.0 meters above mean sea level (AMSL), as tabulated below:

ALL ELEVATIONS IN METERS

GROUND ELEVATION	3.0
SUPPORTING STRUCTURE OVERALL HEIGHT AGL	188.0
ANTENNA HEIGHT AGL	100.0
ANTENNA RCAMSL	103.0

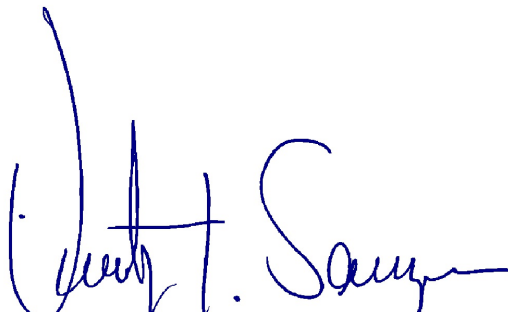
FCC TVStudy Results: 01 Terrain Profile Spacing Requested

The results of a interference study of the proposal using the **FCC TVStudy program (Version 2.2.5)**, shows that no prohibitive interference will occur from the proposal. A copy of the summary report has been included in this application. The applicant accepts any incoming interference that is predicted to exist to the proposed facility by any authorized or pending, primary or secondary TV station at the time this application is submitted. **A cell size of 1.0 kilometer, with a 0.1 terrain profile spacing is requested due to terrain/elevation deviations within the study area.**

Environmental Evaluation Statement:

The environmental evaluation statement concerning this proposal has been included in this application and can be found as a separate file upload within the application. A grant of this proposal would NOT be an action which would have a significant environmental effect as demonstrated in the environmental evaluation statement.

October 4, 2023



Timothy Z. Sawyer, Consulting Engineer

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WDNP-LD LIC EXISTING

FCC LMS File: 0000123622
FCC Facility ID: 67986
NAD 83 Latitude: 27-55-54.90 N
NAD 83 Longitude: 082-24-03.90 W
ERP: 11.50 kW
Channel: 34
Frequency: 593.0 MHz
Ant. RCAMSL Height: 103.0 m
Horiz. Pattern: Directional

WDNP-LD APP

PROPOSED
FCC Facility ID: 67986
NAD 83 Latitude: 27-55-54.90 N
NAD 83 Longitude: 082-24-03.90 W
ERP: 15.00 kW
Channel: 34
Frequency: 593.0 MHz
Ant. RCAMSL Height: 103.0 m
Horiz. Pattern: Directional

TZSTC

2023

OCTOBER

Created on: 10/04/2023
NED 3 Second US Terrain

FCC 51 DBU F(50,90) PREDICTED
SERVICE CONTOURS

MINOR CHANGE
CONTOUR OVERLAP

WDNP-LD TAMPA, FL
PRESENT AND PROPOSED SERVICE CONTOURS
CH 22 LPTV UHF FCC 51 DBU F(50,90)

PROPOSAL IS IN COMPLIANCE WITH LPTV MINOR CHANGE
RULES

NO CHANGE IN SITE LOCATION - ERP INCREASE ONLY

FIGURE 1

FCC 30-MILE SITE MOVE
MINOR CHANGE RULE

Scale 1:750,000

0 15 30 45 km

FIGURE 2 - PSI PSILP12AMR Antenna Pattern
Pre-Rotation Antenna Pattern....

Azimuth (deg)	Relative Field
0.0	1.0
10.0	0.985
20.0	0.949
30.0	0.895
40.0	0.832
50.0	0.767
60.0	0.698
70.0	0.626
80.0	0.556
90.0	0.49
100.0	0.425
110.0	0.358
120.0	0.287
130.0	0.212
140.0	0.141
150.0	0.101
160.0	0.1
170.0	0.122
180.0	0.132
190.0	0.122
200.0	0.1
210.0	0.101
220.0	0.141
230.0	0.212
240.0	0.287
250.0	0.358
260.0	0.425
270.0	0.49
280.0	0.556
290.0	0.626
300.0	0.698
310.0	0.767
320.0	0.832
330.0	0.895
340.0	0.949
350.0	0.985

Rotation Angle = 315

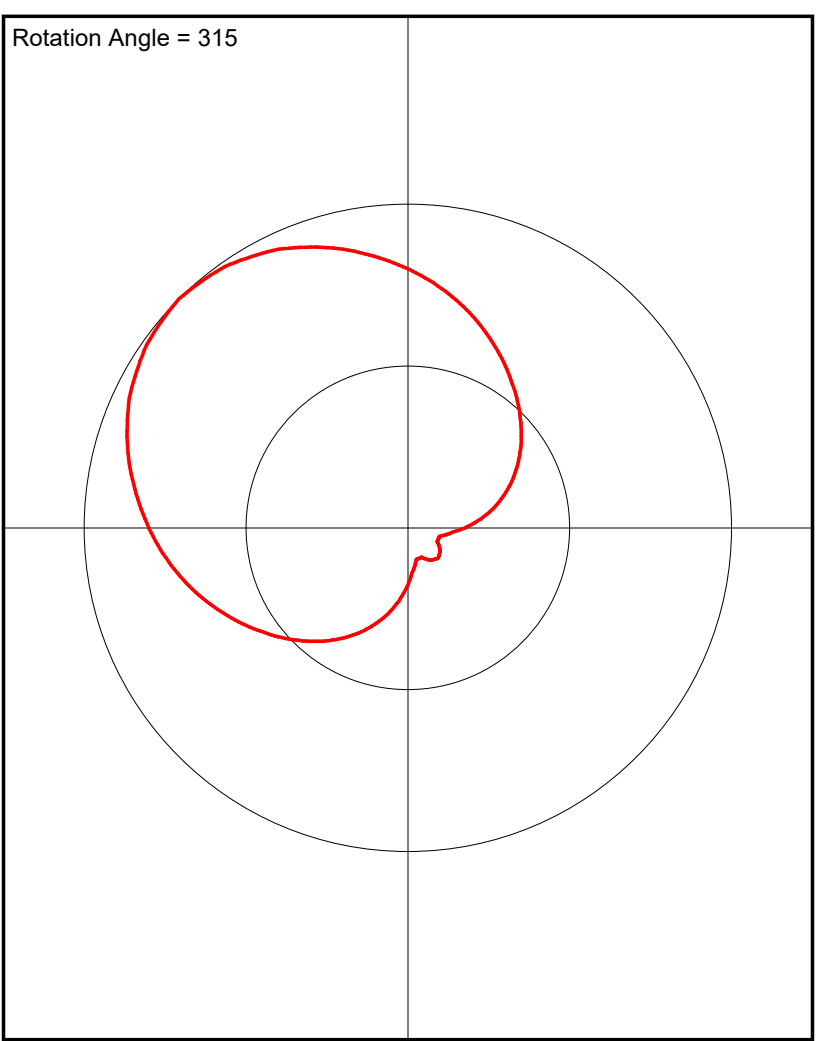


FIGURE 3 - FCC TVSTUDY SUMMARY REPORT

NOTE: 0.1 PROFILE POINT SPACING IS REQUEST/REQUIRED

Study cell size: 1.00 km

Profile point spacing: 0.10 km

Proposal: WDNP-LD D34 LD APP
 File number: WDNP-LD PWR INCREASE
 Facility ID: 67986
 Station data: User record
 Record ID: 717
 Country: U.S.

Build options:

Protect pre-transition records not on baseline channel

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	WMMF-LD	N19+	TX	LIC	VERO BEACH, FL	BLTTL20070912ABV	200.9 km
No	WXCK-LD	D33	LD	LIC	CHIEFLAND, FL	BLANK0000151345	175.5
No	WXCK-LD	N33	TX	LIC	CHIEFLAND, FL	BLTTL19960415IC	175.5
No	WOFL	D33	DT	LIC	ORLANDO, FL	BLANK0000216446	148.8
No	WGCT-LD	D33	LD	LIC	Tampa, FL	BLANK0000059159	16.4
No	WRXY-TV	D33	DT	LIC	TICE, FL	BLANK0000112726	140.7
Yes	WFTX-TV	D34	DT	LIC	CAPE CORAL, FL	BLANK0000117402	139.6
No	WBXJ-CD	D34	DC	LIC	JACKSONVILLE, ETC., FL	BLANK0000108581	273.0
No	W34FW-D	D34	LD	LIC	JASPER, FL	BLANK0000198529	240.6
Yes	WUCF-TV	D34	DT	LIC	ORLANDO, FL	BLANK0000150045	148.1
No	W34FF-D	D34-	LD	LIC	PANAMA CITY, FL	BLANK0000179306	415.7
No	WHDT	D34	DT	LIC	STUART, FL	BLANK0000085738	261.2
No	WSST-TV	D34	DT	LIC	CORDELE, GA	BLANK0000064103	460.6
No	WFTV	D35	DT	LIC	ORLANDO, FL	BLANK0000149068	149.7
No	WTAM-LD	D35	LD	LIC	TAMPA, FL	BLANK0000106115	18.6
No	WFLX	D35	DT	LIC	WEST PALM BEACH, FL	BLANK0000184784	261.2

No non-directional AM stations found within 0.8 km

Directional AM stations within 3.2 km:

WQBN 1300 L DAD D TEMPLE TERRACE, FL BL20030730BDG

WQBN 1300 L DAD N TEMPLE TERRACE, FL BL20030730BDG

EXISTING TOWER WITH NO CHANGES - THIS IS AN RADIATED POWER INCREASE ONLY

Record parameters as studied:

Channel: D34
 Mask: Full Service
 Latitude: 27 55 54.90 N (NAD83)
 Longitude: 82 24 3.90 W
 Height AMSL: 103.0 m
 HAAT: 0.0 m
 Peak ERP: 15.0 kW
 Antenna: PSI-PSILP12AMR (ID 1007408) 315.0 deg
 Elev Pattn: Generic
 Elec Tilt: 1.00

50.7 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	9.59 kW	87.1 m	39.3 km
45.0	3.60	91.8	35.0
90.0	0.467	90.2	24.3
135.0	0.261	92.7	21.5
180.0	0.467	100.5	25.5
225.0	3.60	102.4	36.3
270.0	9.59	100.6	41.0

315.0 15.0 93.2 42.3

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 95 m

Distance to Canadian border: 1527.7 km

Distance to Mexican border: 1454.3 km

Conditions at FCC monitoring station: Vero Beach FL

Bearing: 101.4 degrees Distance: 177.4 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:

Bearing: 308.9 degrees Distance: 2489.4 km

Study cell size: 1.00 km

Profile point spacing: 0.10 km

Maximum new IX to full-service and Class A: 0.50%

Maximum new IX to LPTV: 2.00%

Proposal causes 0.38% interference to BLANK0000117402 LIC scenario 1

Proposal causes 0.32% interference to BLANK0000150045 LIC scenario 1

---- Below is IX received by proposal WDNP-LD PWR INCREASE ----

Proposal receives 1.38% interference from scenario 1

No IX check failures found.

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WDNP-LD
LPTV CHANNEL 34 OPERATION
FACILITY ID: 67986
TAMPA, FLORIDA
OCTOBER 2023

ENVIRONMENTAL EVALUATION STATEMENT

A grant of this proposal would NOT be an action which would have a significant environmental effect as demonstrated in this environmental evaluation statement. Any changes in equipment, or construction, if necessary will not trigger any event with regards to Section 106 of the National Historical Preservation Act (NHPA).

The proposal does not meet any of the criteria specified in Section 1.1307 of the FCC Rules. More specifically, the proposed facilities are not known to fall within any of the categories enumerated in Sections 1.1307(a)(1)-(7) and will not involve the use of high intensity white lights. Furthermore, operation of the proposed facility will not involve the exposure of workers or the general public to levels of radio frequency electromagnetic fields exceeding guidelines adopted by the Federal Communications Commission. (The current FCC guidelines are based upon criteria contained in the National Council of Radiation Protection and Measurements (NCRP) Report No.86 (1986) and ANSI/IEEE C95.1-1992.)

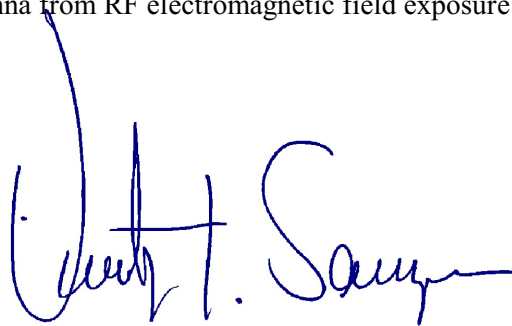
CALCULATED POWER DENSITY AT 2 METERS AGL (0.5 ANTENNA RELATIVE FIELD VALUE) ERP MAX (H ONLY)

CR AGL 100.0 M ERP MAX 15.0 KW	MPE ($\mu\text{W}/\text{CM}^2$)	CALCULATED VALUE ($\mu\text{W}/\text{CM}^2$)	% OF MPE	PASS/FAIL
CONTROLLED AREA	1976.7	13.041	0.66%	PASS
PUBLIC AREA	395.3		3.30%	PASS

The general public will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs are posted at the site. The applicant will coordinate exposure procedures with any co-located facilities and will reduce power or cease operation as necessary to protect persons having access to the site, tower, or antenna from RF electromagnetic field exposure in excess of FCC guidelines.

October 4, 2023

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